

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
13 October 2005 (13.10.2005)

PCT

(10) International Publication Number
WO 2005/095924 A1

(51) International Patent Classification⁷: **G01N 15/08**,
27/12, 33/44

(74) Agent: **SCHIWECK, Wolfram, D.**; Viering, Jentschura
& Partner, Rochor Post Office, Rochor Road, P.O. Box
1088, Singapore 911833 (SG).

(21) International Application Number:
PCT/SG2004/000075

(81) Designated States (*unless otherwise indicated, for every
kind of national protection available*): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(22) International Filing Date: 31 March 2004 (31.03.2004)

(25) Filing Language: English

(26) Publication Language: English

(71) Applicant (*for all designated States except US*): **AGENCY
FOR SCIENCE, TECHNOLOGY AND RESEARCH**
[SG/SG]; 20 Biopolis Way, #07-01 Centros, Singapore
138668 (SG).

(84) Designated States (*unless otherwise indicated, for every
kind of regional protection available*): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), Euro-
pean (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR,
GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK,
TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
ML, MR, NE, SN, TD, TG).

(72) Inventors; and

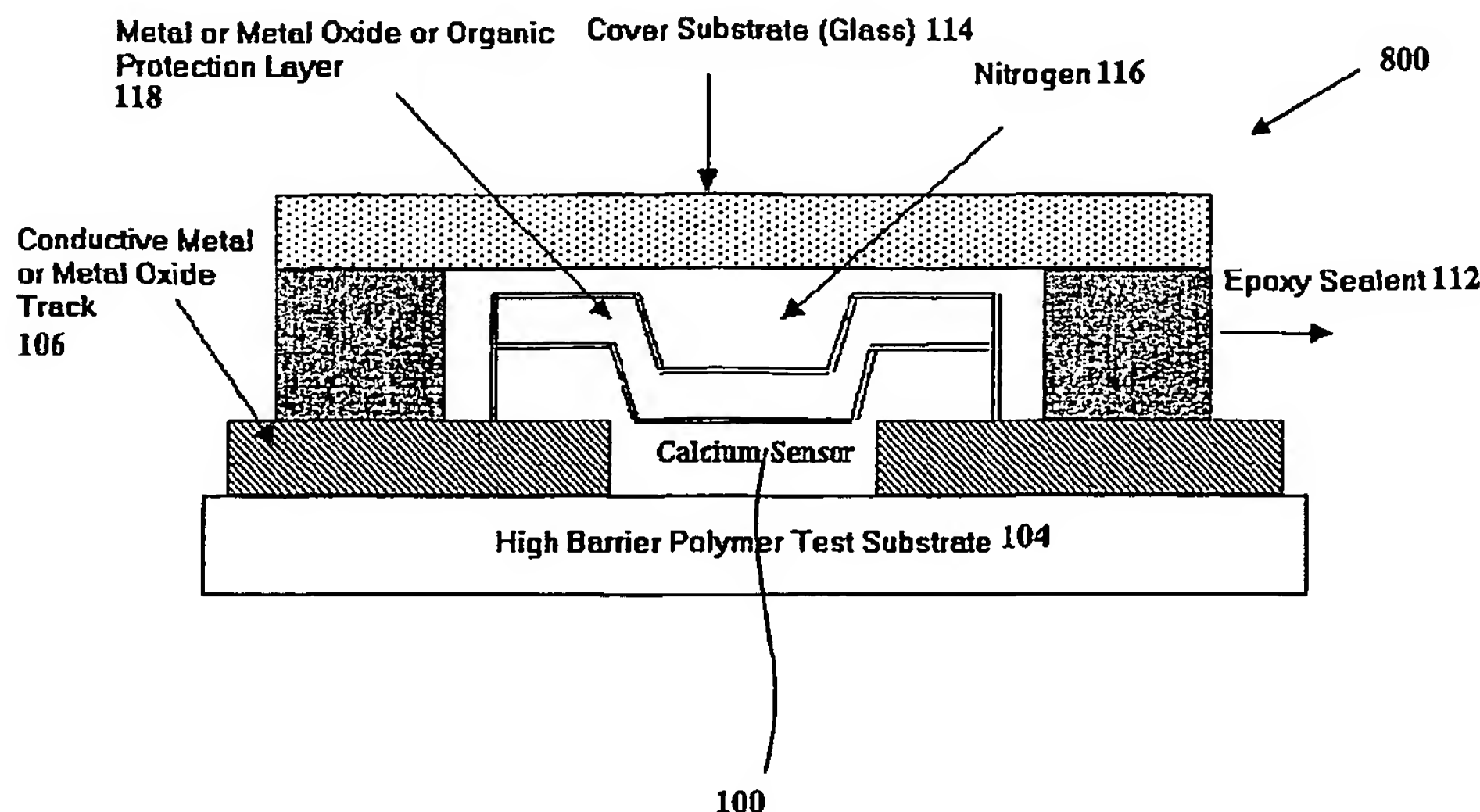
(75) Inventors/Applicants (*for US only*): **CHUA, Soo, Jin**
[MY/SG]; 37 Cheng Soon Crescent, Singapore 599909
(SG). **RAMADAS, Senthil, Kumar** [IN/SG]; Block 427,
#04-649 Bedok North Road, Singapore 460427 (SG). **HE,
Xinbo** [CN/SG]; Block 129, #07-370 Bukit Batok West
Avenue 6, Singapore 650129 (SG).

Published:

— with international search report

[Continued on next page]

(54) Title: A SENSOR FOR MEASURING GAS PERMEABILITY OF A TEST MATERIAL



(57) Abstract: A sensor for measuring gas permeability of a test material, comprising: an electrically conductive sensing element that comprises a water and/or oxygen sensitive material, wherein the reaction of said material with water or oxygen when the sensing element is contacted with water and/or oxygen results in a change in the electrical conductivity of the sensing element, and two electrodes electrically connected to the sensing element.



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.